



[1997 \(January - December\)](#)

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## The development model imposed on farmers: a fundamental cause of shrinking forests in Vietnam

*Geographer Rodolphe De Koninck, an expert on Southeast Asia, has recently authored a book published by the International Development Research Centre (IDRC) entitled *Le recul de la forêt au Vietnam* (The Shrinking Forests of Vietnam). In his book, Dr. De Koninck, a tenured professor at Laval University's Geography Department, describes the procedures and conclusions of a study which involved close to 40 Vietnamese and Canadian researchers. In an interview with IDRC REPORTS magazine, Professor De Koninck's remarks seemed particularly incisive as forest fires ravaged Southeast Asia in October 1997.*

*Interview by Raymond Laprée*

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**IDRC: PROFESSOR DE KONINCK, THE RESEARCH TEAM WITH WHICH YOU WERE ASSOCIATED FROM 1994 TO 1996 DREW CONCLUSIONS THAT SHOOK ESTABLISHED SCIENTIFIC THINKING. COULD YOU GIVE US A BRIEF OUTLINE OF THEIR MAGNITUDE?**

**R. De K:** What immediately comes to mind is the urgency and timeliness of this subject: fires are currently destroying immense forested areas in Southeast Asia, particularly in Indonesia. The situation is very serious—economically and environmentally. Besides the harmful effects on the health of the population, the impact will be felt for years to come. Southeast Asia had already lost a third of its forest cover since the 1960s, and this current disaster now reveals the fallacy of the official \*\*\*discourse/line of reasoning on the destruction of forests in the region. This is what relates to your question. For years, the official discourse on deforestation has blamed migrant ethnic minorities living in the forests, and has been put forward by leaders of countries and decision makers who want to encourage settlement. We came to the opposite conclusion: the principle cause of the deforestation is the development model imposed by political and economic forces in these countries and by powerful world economic organizations, such as the World Bank. This model leads to the massive expansion of agriculture based on export. So, in Vietnam, for every hectare cleared by members of ethnic minorities, some 20 others are stripped for farming by the Kinh settlers (the majority ethnic group).

**IDRC: BUT AREN'T FIRES USED BY EVERYONE CLEARING LAND IN FORESTED AREAS?**

**R. De K.:** There is some confusion being purposely maintained around this still poorly documented practice, by those who point to slash and burn techniques as a cause of deforestation. There are two methods of slash and burn, one is healthy and the other is destructive for the forest. The minorities who

have been living in the forest for centuries, in fact, for over 1,000 years (there are 25 ethnic minority groups in the Vietnamese province of Lam Dong alone), regularly clear land for farming using slash- and-burn methods. They set fire to a patch of forest and then cultivate it for a year or two without ploughing the soil, move on to a new spot where they do the same thing again, and so on, until they return to the original place some 30 years later to continue their shifting cultivation. A cycle of this length allows the forest to grow back and continuously regenerate itself. In some cases, this slash and burn process even increases the vitality of the forest.

But there is another way to practise slash and burn. Encouraged by expansionist economic policies, the Viet (or Kinh) settlers, who have traditionally lived on the plain, are acquiring land that encroaches on the forests. They burn the forest cover themselves or, more often, obtain land after the logging companies have taken the best wood for export, under agreements with the government. The settlers burn what's left. This new land extends into areas where ethnic minorities live (the plateaus), who in turn retreat into the forest to areas that are less favourable to their traditional practices (slopes or higher terrain where the type of forest is different). The settlers subject the land to continuous cultivation, which is, most frequently, intensive (coffee, cashew nuts, rubber), and employs agricultural practices that involve ploughing the soil, thereby reducing its capacity for reforestation. Sometimes, these same settlers further expand their land, to the detriment of the forest, or use the forest for domestic or business purposes, or even just to fire the bricks with which to build their houses, even though they already have wood for construction.

In short, this is the main reason for the deforestation we have scientifically documented in Vietnam. We also know that the forest fires currently burning in Indonesia were caused by settlers moving into new areas or by large agricultural enterprises that have cleared land for monoculture (hevea or oil palm) destined for export. This situation can no longer be concealed.

**IDRC: CONSIDERED IN THE CONTEXT OF SOUTHEAST ASIA AS A WHOLE, ISN'T VIETNAM'S SITUATION PARTICULAR?\*\*\***

**R. De K.:** The deforestation in Vietnam is similar, but let me describe the specific context in which it is occurring. Vietnam has one of the highest population densities in the region, and a large proportion (3/4) of its area is mountainous. The country has been experiencing a rapid rate of economic growth; and has made political commitments with the objective of catching up or competing with the top performers in Southeast Asia — at the encouragement of partners who may be partly motivated by a desire to ease their own guilt. Additional factors at play are the influence of the bureaucracy and gerontocracy, and the transition between two differing economic systems, communism and liberalism. And it would appear that this transition can be accomplished only through concession and compromised principles.\*\*\*

**IDRC: DOESN'T THAT SOUND LIKE THE POINT OF VIEW OF THE "NORTH" PROJECTED ONTO THE SITUATION IN THE "SOUTH"?**

**R. De K.:** Vietnamese researchers would tell you the same thing. The agricultural expansion of the Kinh, due to a number of these circumstances, is by far the main reason for the loss of Vietnam's forests. But we had to move forward together throughout the two years in which we carried out this study, and that was thanks to the people in the field and their desire to learn, thanks to the camaraderie that arose among the members of our team, and thanks to the intellectual honesty of the researchers. For the Kinh, recognizing their primary responsibility as the ethnic majority was not easy. But they acknowledged the conclusions reached through our hypothetico-deductive research method (which involves defining the objective of the study and the problem, formulating a hypothesis, and identifying the means for verifying this hypothesis). They are now as convinced as we are. But it was a difficult learning process for them, because they had been taught under a different tradition, in which science consists of gathering proof to support a statement made at the outset and presumed to be true. In fact, the first year of the project consisted largely of rejecting very large quantities of data that did not conform to our research methodology. Through persistence and rigorousness, new scientific habits gradually took root, leading to results that were reliable and methodologically valid.

## **IDRC: WAS THE RIGOROUS APPLICATION OF SCIENTIFIC METHOD THE GREATEST HURDLE IN CARRYING OUT THIS STUDY?**

**R. De K.:** It was one, but there were others. There was the language problem, for example, for me. I had not had the opportunity to learn Vietnamese as I had Indonesian. However, many students from Laval University made great progress in the language, and some of our Vietnamese colleagues know French and, especially, English. And there was the lack of data relevant to our hypotheses. The data on soil use appeared fragmentary, especially when we wanted to look at the past. Moreover, all the data—photographic, cartographical, statistical or other, contemporary or historical—were often unreliable, incomplete, contradictory or difficult to report over a fixed spatial basis. Other data were convertible, but at a prohibitive cost. And some members of our team had a tendency to spread themselves too thin in terms of not devoting their energies exclusively to collaborating on this project. I should explain that several countries were funding research in Vietnam, but were not always terribly concerned with the scientific quality of the work done. The researchers took advantage of this funding bonanza, took on several research projects at once, and ended up swamped. We have recommended that in future our research be entrusted exclusively to persons involved in well-controlled study programs.

And finally, in terms of difficulties encountered, we had to adapt the framework of our research to the material available and concentrate on two provinces rather than considering the whole of the country. That explains, for example, the different time projections for each of the two provinces studied. Also, the two contexts were already very different. But this diversity allowed us to extend our conclusions to the entire country (with the exception of some very specific cases, such as mangrove forests) without much risk of error.

## **IDRC: DO YOU BELIEVE THAT THE SITUATION WILL CHANGE IN THE IMMEDIATE FUTURE?**

**R. De K.:** I'm sure that the joint study we carried out concurs with conclusions that many geographers, anthropologists, and other researchers have already drawn, at least intuitively. And there is a sense of urgency. Certainly, the developed nations have reversed the trends toward deforestation in their own countries. Spain, for instance, has increased the proportion of its territory set aside for forests from 10% to 32%. France has gone from 14% to 30%, and Japan, from 50% to 66%. But, in Vietnam, deforestation is occurring at a staggering rate (2% to 3% per year) in a fragile ecosystem (about 40% of the country's soil surface is currently denuded). There is a risk that the turnaround will be made too late and that it will not be possible for the country to again become a nation that can \*\*\*redress/offset the wood supply.\*\*\*

In my opinion, the best outcome of the project was the collaboration on one scientific procedure, which was new to the Vietnamese researchers. We managed it using the available documentation, and by promoting the learning of techniques such as computer cartography, for example. Our students were each partnered with a member of the Vietnamese team, and they conducted research together. The 20 or so Vietnamese researchers most closely associated with the study came from various research teams and institutions, which are now benefiting from the researchers' new skills. Some of the researchers are already teaching the methodology and techniques they acquired, at the university level.

Also, the project is now in its second phase, called Forest Challenge 2, in which the Vietnamese researchers have had, and will have, a greater role in the definition of specific projects. For example, they have proposed a study on the perception of biodiversity by Kinh and non-Kinh populations. We will maintain an ongoing exchange with the Vietnamese graduate students in Master's and doctoral geography programs. They have been partnered with students from here, and will receive scholarships for undertaking specific studies during their training. Both sides will benefit from the two countries' resources. The University of Sherbrooke has also formed a partnership with Laval University, in particular for its remote sensing skills. A community of international scientific exchanges, which is as necessary for Canada and Quebec as it is for Vietnam, continues to develop and take shape. With support from all sides, including financial contributions, this community will benefit all involved. These are the many positive results of our

study.

In conclusion, I would like to stress that the discourse that falsely accuses one type of traditional forestry to conceal the real fundamental and instrumental causes of deforestation in the country does not hold up in the face of what our research team demonstrated in Vietnam. I hope that the pan-regional consolidation of ASEAN will also make it possible for the 10 nations that will soon comprise it to work effectively together on social and environmental policy. Managing the remaining forests is an issue that concerns every geographic level — local, national and pan-regional. As for Vietnam, it will be better equipped to meet this challenge.

## **IDRC: THANK YOU, PROFESSOR DE KONINCK**

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